

Title (en)

Methods and apparatus for directing airflow to a compressor bore

Title (de)

Methode und Einrichtung zur Zufuhr von Luft ins Innere eines Kompressorrotors

Title (fr)

Méthode et dispositif d'alimentation en air pour l'intérieur d'un rotor d'un compresseur

Publication

EP 1120543 A3 20030212 (EN)

Application

EP 00311598 A 20001221

Priority

US 49062500 A 20000124

Abstract (en)

[origin: EP1120543A2] A gas turbine engine includes a compressor rotor assembly which directs air at a sufficient pressure and temperature to a compressor rotor bore. The compressor assembly includes a compressor (12, 14) including a plurality of rotors (32) joined with a plurality of couplings (34). Each of the rotors includes a radially outer rim (40), a radially inner hub (42), and a web (44) extending therebetween. The web includes a flange (60) including a plurality of slots (104) which define a plurality of radial vanes (120) that are airfoil-shaped. The vanes effectively de-swirl bleed air (110) and re-direct the airflow to a compressor bore. <IMAGE> <IMAGE>

IPC 1-7

F01D 5/08; **F04D 29/58**

IPC 8 full level

F01D 5/08 (2006.01); **F04D 29/32** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)

F01D 5/082 (2013.01 - EP US); **F01D 5/085** (2013.01 - EP US); **F04D 29/321** (2013.01 - EP US); **F04D 29/582** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US)

Citation (search report)

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- [X] US 3647313 A 19720307 - KOFF BERNARD L
- [A] US 4674955 A 19870623 - HOWE WILLIAM J [US], et al
- [A] FR 2614654 A1 19881104 - SNECMA [FR]

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